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(71) Applicant: SILICON LIGHT MACHINES [US/US];
385 Moffett Park Drive, Suite 115, Sunnyvale, CA 94089 (US).

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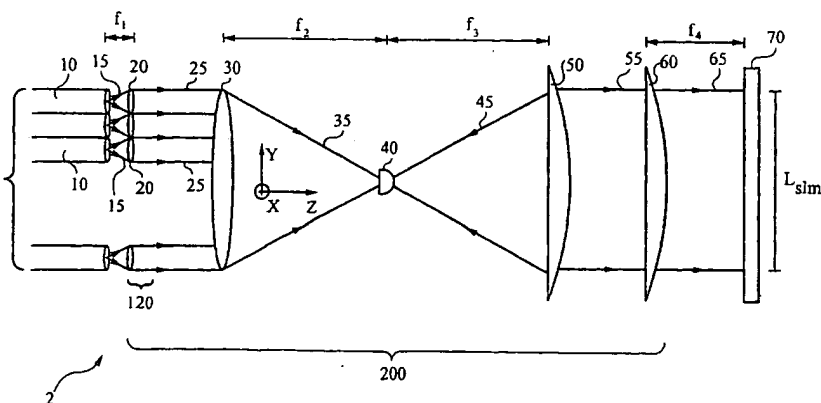
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(72) Inventors: CARLISLE, Clinton; 562 Driscoll Place, Palo Alto, CA 94306 (US). TRISNADI, Jahja, I.; 21800 San Fernando Avenue, Cupertino, CA 95014 (US).

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(54) Title: AN ILLUMINATION SYSTEM FOR ONE-DIMENSIONAL SPATIAL LIGHT MODULATORS EMPLOYING MULTIPLE LIGHT SOURCES



(57) Abstract: The present invention is directed to illuminating a one-dimensional spatial light modulator (70) using an illumination system employing multiple light sources (10). The illumination system comprises a parallel array of light sources which provides a plurality of light outputs to an optical train (200). The optical train effectively combines the light sources into a single light source. The single light source provides a single light output for uniformly illuminating the spatial light modulator. The optical train includes a first optical train for receiving the light outputs from each light source, magnifying each light output, and overlaying each of the light outputs to form a single real magnified image. A mode conversion lens receives the single real magnified image, converts a mode profile of the single real magnified image into a top hat mode profile, and outputs a diverging light beam with a top hat mode profile. A second optical train shapes the light beam into an appropriate spatial geometry in such a manner that the light beam effectively illuminates the entire spatial light modulator, and directs the light beam onto the spatial modulator.

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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G02B27/12 G02F1/1335 G02B27/09 B41J2/45 G02F1/13357		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
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Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, PAJ, WPI Data		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
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X	EP 1 003 071 A (EASTMAN KODAK CO) 24 May 2000 (2000-05-24) column 8; figure 1A --- -/--	1,3,13, 18,22
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
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